

REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful consideration given the present application, and for the personal interview conducted on June 16, 2005. The application has been carefully reviewed in light of the Office action and interview, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

Claims 1–20, 24–32, and 35–37 remain in this application. Claims 21–23 and 33–34 have been canceled. Claims 38–42 have been added without adding any new matter.

The Examiner argued that the priority claim in the specification should be deleted, apparently because the priority document does not support all of the disclosed material in the application. Applicant is aware of no requirement that the priority document support *all* of the material in the current application, and thus the Examiner's request is not proper. Accordingly, applicant is not amending the specification to withdraw the reference to the priority document.

Claims 1–4, 8–19, 21–24, 27–29, 31, and 35–36 were rejected under 35 U.S.C. §102(e) as being anticipated by LeBreton (U.S. 6,660,214 B2). Claims 5–7 were rejected under 35 U.S.C. §103(a) as being unpatentable over LeBreton in view of Wiltshire (U.S. 4,101,254). Claims 10, 16–18, 25–26, 30, and 32–34 were rejected under 35 U.S.C. §103(a) as being unpatentable over LeBreton in view of Murphy (U.S. 6,171,423) or vice versa. For the following reasons, the rejections are respectfully traversed.

As discussed at the personal interview, the LeBreton '214 reference is based on the same priority document as the current application. The current application was filed

prior to LeBreton '214. Thus, LeBreton is not prior art under §102(e), and thus these rejections are improper. It is thus irrelevant whether the priority document does not support the use of discrete fibers, as argued by the Examiner, because both LeBreton '214 and this application claim priority from the same provisional application. The Examiner agreed to withdraw these rejections based on the discussion at the personal interview.

Claims 1–5, 11, 13, 15, 21, 23, 25–30, and 35 were rejected under 35 U.S.C. §102(b) as being anticipated by Murphy *et al.* (U.S. 6,171,423 B1). Claims 3–9, 12, and 36–37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Wiltshire (U.S. 4,101,254). Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Carter *et al.* (U.S. 2003/0111473 A1). Claim 16 was rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Sandmark (U.S. 6,582,540). Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Lankheet (U.S. 4,267,142). Claim 24 was rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Banchelin *et al.* (U.S. 5,814,268). Claims 19–20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Murphy in view of Reyes (U.S. 6,010,411). Claim 22 was rejected under §103(a) as being unpatentable over Murphy in view of Reyes and further in view of Carter. Claims 31–32 were rejected under §103(a) as being unpatentable over Murphy in view of Wiltshire, and further in view of Carter and Reyes. Claims 33–34 were rejected under Murphy in view of Wiltshire, and further in view of Reyes. For the following reasons, the rejections are respectfully traversed.

Claim 1, as amended, recites a step of “cutting thermoplastic fibers to form a plurality of discrete thermoplastic fibers.” Claim 38 recites similar limitations. None of the cited references teach this step.

At the personal interview, it was discussed that Murphy does not teach any step of cutting thermoplastic fibers. Col. 4, line 65 of Murphy was also discussed, at which time applicant’s representative pointed out to the Examiner that the “chopped fiber” of the reference is referring to reinforcing fiber, not thermoplastic fiber, as a close reading of col. 4, lines 59–67 shows. Thus, claims 1 and 38 are patentable over Murphy.

None of the other cited references overcome the shortcomings of Murphy. In particular, Wiltshire does not teach the use of thermoplastic fibers. Thus claims 1 and 38 are patentable over the combination of references. Claims 2–26, and 39–42, which depend on one of claims 1 and 38, are thus also patentable over the references for at least the same reasons as their parent claims.

Claim 27 recites the step of “forming one or more of said cylindrical sidewall portion, domed bottom portion, and domed top portion by collecting said plurality of discrete reinforcing fibers and said plurality of discrete thermoplastic fibers onto a vacuum screen to form said one or more portions.” New claim 38 recites similar limitations. None of the cited references teach this step, and in particular, Wiltshire does not teach the use of thermoplastic fibers, and thus claims 27 and 38 are patentable over the references. Claims 28–30, which depend on claim 27, and claims 39–42, which depend on claim 38, are patentable over the references for at least the same reasons as the parent claim.

Claim 31 recites a “hollow preform of glass reinforcing fibers approximately one inch long intimately intermixed with separate thermoplastic fibers approximately two inches long.” None of the references teach separate fibers of the listed lengths.

The Examiner argues that paragraph [0065] of Carter teaches fibers chopped into lengths of from 0.5 inches to 3 inches. However, this reference teaches chopping “TWINTEX,” which is a commercial product made up of thermoplastic material intermixed with reinforcing fibers. Thus, the reinforcing fibers and thermoplastic material are, of necessity, of the same length according to the Carter reference. Accordingly, the reference does not teach the mixed lengths of the claim, and thus claim 31 is patentable over Carter. Furthermore, the reference does not teach intermixing *separate* cut fibers, because the fibers are already pre-intermixed in TWINTEX, and thus the fibers are not separate. Thus, the claim is patentable over Carter for this reason as well.

Claim 35 recites the step of “positioning said preform against the inner surface of said corresponding mold portions without a prior winding step.” A close reading of Murphy makes clear that Murphy teaches a winding step prior to positioning its preform in the mold. Thus, Murphy does not teach this element of the claim. None of the other references overcome this shortcoming, and thus claim 35 is patentable over the references.

Claim 36 recites the step of “positioning said discrete cylindrical sidewall portion, said discrete domed bottom portion, and said discrete domed top portion against the inner surface of said corresponding mold portions such that said cylindrical sidewall portion *overlaps* each domed portion to form a preform having said core inserted into an interior of said preform.”

The Examiner argues that Wiltshire teaches the cited claim limitation. However, Wiltshire teaches overlapping the sidewall matting to form a "longitudinal overlap or seem" (see col. 1, lines 30–35). A "longitudinal" overlap is, by definition, along the length of the cylinder, not around the radius or circumference, as the overlap of the claim would be, and thus the reference does not teach the cited claim limitation. None of the other references overcome the Wiltshire shortcoming, and thus claim 36, and dependent claim 37, are patentable over the references.

Finally, the Examiner has not provided the proper motivation for combining the references. The burden is on the Examiner to make a *prima facie* case of obviousness (MPEP § 2142). To support a *prima facie* case of obviousness, the Examiner must show that there is some *suggestion or motivation* to modify the reference (MPEP § 2143.01). The mere fact that references *can* be combined or modified, alone, is not sufficient to establish *prima facie* obviousness (*Id.*). The prior art must also suggest the *desirability* of the combination (*Id.*). The fact that the claimed invention is within the *capabilities* of one of ordinary skill in the art is not sufficient, by itself, to establish *prima facie* obviousness (*Id.*).

The Examiner has cited no support for any such suggestion or motivation for the combination from within the references, and neither does the Examiner provide any references supporting any motivation to modify the reference(s) by making the combination.

Merely listing an advantage or benefit of the combination is not sufficient, as some rationale for combining the references must be found in the references themselves, or drawn from a convincing line of reasoning based on established scientific principles practiced by one skilled in the art that some advantage or beneficial result

would be produced by the combination (MPEP §2144). Such motivation cannot be found in the application itself, as such hindsight is impermissible; the facts must be gleaned from the prior art. (MPEP §2142, last paragraph).

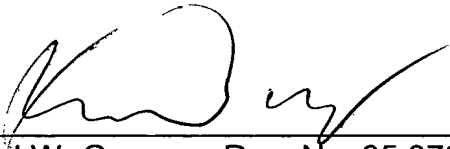
“To reach a proper determination under 35 U.S.C. 103, the Examiner must step backward in time and into the shoes worn by the hypothetical ‘person of ordinary skill in the art’ when the invention was unknown and just before it was made [and] the Examiner must then make a determination whether the claimed invention ‘*as a whole*’ would have been obvious at that time to that person.” (MPEP §2142, emphasis added). It is not proper to merely combine various elements from various references. The invention must be obvious “as a whole,” not as a piecemeal combination of elements from various references.

Accordingly, the rejections for obviousness are not supported by the Office Action and thus the rejection is improper, and should be withdrawn.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 32285.

Respectfully submitted,
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Date: August 4, 2005